## Williams' comments

# P. 43 water quality - Possible language.

Methane-producing coalbeds in the Powder River Basin of Montana contain water that is dominated by ions of sodium and bicarbonate. Sodium adsorption ratios (SAR) are generally between 40 and 60, and total dissolved solids concentrations between 1,000 and 2,000 mg/L. Sulfate concentrations in production water are very low. *This production water is typically of acceptable quality for domestic and livestock use; however, its high SAR makes it undesirable for direct application to soils.* Source: 2008 CBM report from MBMG

# **P.44 Montana Regulations**

The Montana Board of Oil and Gas Conservation (MBOGC) oversees most facets of CBM development in the same way it does other oil and gas operations. A statute passed in 1961, before CBM development began in the state, speaks to the management of water produced in association with oil or gas extraction within a controlled ground water area. (Eliminate Footnote #93).

The production, use, or disposal of that water is under the "prior jurisdiction" of the Board of Oil and Gas Conservation, but the DNRC can petition for hearings on the operations. 94

That statute was acknowledged in 1999 when the DNRC created the Powder River Basin Controlled Ground Water Area, which deals specifically with the management of water produced from CBM extraction. (Insert Footnote#93 citing 85-2-506, "A variety of factors ...).

The order states that water levels in targeted aquifers could be reduced near project areas for long periods of time in an area where water is scarce. It also called for extended monitoring of ground water data.95

**P. 45 Footnote 99.** Change "requiring" to "evaluating regarding Montana Supreme Court findings. Add in that court gave DEQ 180 days.

Page 45, Footnote 100. Reinjection into Class II oil and gas wells is regulated by MBOGC. (Rest of comment has less to do with the context of the footnote than it is a policy suggestion for the WPIC).

#### Page 46:

He also wrote that the two sections of law <u>related to managing CBM water</u> are constitutional. (The two sections are cited in the preceding paragraph. It is redundant to say that the "sections of law statutorily specifying legal methods ..." If they are in law, by definition the methods they specify are in statute and considered legal unless otherwise proven.)

## P. 47

"Considering water developed through CBM development as not being a "ground water" appropriation but as an appropriation from their pipeline is more consistent with the statutory scheme of ... 82-11-175

and is eminently more practical," the examiner wrote, adding that if the company wanted to dispose of the water through other means <u>provided by 82-11-175</u>, a beneficial use permit would not be required.